Notice of Allowability	Application No.	Applicant(s)	
	10/713,516	GARFIELD ET AL.	
	Examiner	Art Unit	
	Rip A. Lee	1713	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *March 23, 2006*.

2. ☒ The allowed claim(s) is/are *1, 3-11, 13-19 and 21-31*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☐ All b) ☐ Some* c) ☐ None of the:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

Claim 26, line 7	delete "of"
Claim 26, line 7	insert "of" between "99 %" and "ethylene"

Allowable Subject Matter

The following is an examiner's statement of reasons for allowance: Claims 1, 3-11, 13-19, and 21-31 are allowed over the closest references cited below.

The present invention is drawn to a composition comprising a rubber composition selected from the group consisting of SIS, SBS, and SEBS block copolymers, an aromatically modified C_5 hydrocarbon resin, and a non-flammable solvent system including at least one chlorinated solvent. In a more limited embodiment, the invention is drawn to a composition comprising a block copolymer selected from the group consisting of SIS, SBS, and SEBS block copolymers, an aromatically modified C_5 hydrocarbon resin, and a solvent system comprising about 80 % to about 90 % of ethylene tetrachloride, wherein the composition is non-flammable. Another embodiment of the invention is drawn to a solution comprising a composition including SEBS block copolymer and an aromatically modified C_5 hydrocarbon resin dissolved in a non-flammable solvent system including at least one chlorinated organic solvent.

Gupta (U.S. 4,515,992) teaches a solution comprising SBS block copolymer and hydrocarbon resin dissolved in about 80 wt % of toluene, however, the hydrocarbon solvent may be replaced with perchloroethylene or trichloroethylene. Various types of rosin and polyterpene rosin tackifier are available for the compositions of the invention, however, there is no teaching or suggestion to use aromatically modified C_5 hydrocarbon resin. One of ordinary skill in the art would not have found it obvious and would not have sufficient motivation to replace rosin tackifiers with an aromatically modified C_5 hydrocarbon resin in order to arrive at the composition of the instant claims.

Williams *et al.* (U.S. 4,853,069) discloses a composition comprising a chlorosulfonated polyethylene base resin, tackifying agent, and inert, volatile solvent/diluent for reducing viscosity. The tackifier component is selected from modified petroleum resins, which are commercially available as Picco™ series resins. The preferred solvent is a 50/50 mixture of perchloroethylene and chlorotoluene (col. 7, line 33). There is no teaching or suggestion to use SIS, SBS, and SEBS block copolymers, and given that the critical component of the invention is the chlorosulfonted polyethylene base resin, one of ordinary skill in the art would not have found

it obvious, and would have little motivation, to replace chlorosulfonted polyethylene base resin with SIS, SBS, and SEBS block copolymers in order to arrive at the subject matter of the instant claims.

Skelley teaches an adhesive composition comprising a natural or synthetic rubber component, one of which may be styrene-butadiene copolymer rubber. Various tackifying resins may be used, such as styrene-modified hydrocarbon resins. The composition may contain up to 10 wt % of solvent in order to adjust the viscosity of the composition, and suitable solvents include halogenated hydrocarbons such as trichloroethylene, methylene chloride, perchloroethylene, and chloroform. The reference does not teach SBS block copolymer as the specific type of styrene-butadiene copolymer rubber. It may be argued that arriving at the notion of using SBS block copolymer is obvious, but the inventor shows that Tylac 68522, a carboxylated styrene butadiene rubber, is well suited for the adhesive of the invention. It is the examiner's position that one of ordinary skill in the art would have little motivation to replace the styrene butadiene rubber taught by Skelley with an undisclosed SBS block copolymer rubber in order to arrive at the claimed invention. Coupled with the fact that one of skill in the art would need to cull a particular tackifier resin and solvent from a series of disclosed materials, it is maintained that the subject matter of the instant claims is not obvious over Skelley.

Miller (GB 2,223,023) discloses a composition of matter comprised of SIS block copolymer, hydrocarbon resin, and a solvent system containing chlorinated solvent and trichloroethylene. The hydrocarbon resin, which is derived from petroleum, contains lower alkyls having 5-20 carbon atoms. The reference does not teach or suggest use of aromatically modified C_5 resin as the specific type of hydrocarbon resin, and one of ordinary skill in the art would not have found it obvious to use this particular material as the tackifier in the invention of Miller.

Gaveske (U.S. 6,025,032) teaches a waterproofing composition comprising SEBS, SBS, or SIS block copolymer, hydrocarbon resin, and organic solvent. The hydrocarbon resin is coumarone-indene resin, and there is also mention of styrene-cyclopentadiene copolymer as another potential resin for tackifying purposes. Halogenated solvents such as methylene chloride are prescribed in the examples. The reference does not teach or suggest the subject matter of the

instant claims; one of ordinary skill in the art would not construe styrene-cyclopentadiene copolymer equivalent to aromatically modified C_5 resin.

Another aspect of the invention a method of coating a wall comprising preparing a solution comprising an aromatically modified C_5 hydrocarbon resin, a rubber, pigment, and a non-flammable chlorinated solvent system, wherein the solution has a viscosity of about 6000 cps to about 14,400 cps (77 °F) and about 2000 to about 5600 cps (140 °F), spraying said solution on a surface of a wall, and evaporating the solvents. The invention is also drawn to a wall having an interior surface and an exterior surface comprising a continuous spray coated coating disposed on at least one surface, said coating comprising an aromatically modified C_5 hydrocarbon resin and a rubber composition, said coating produced by mixing said hydrocarbon resin an said rubber with a non-flammable solvent system comprising a chlorinated organic solvent in an amount sufficient to provide a homogeneous solution having a viscosity of about 6000 cps to about 14,400 cps at 77 °F, spraying said solution on a surface of a wall, and evaporating the solvents.

None of the cited references teaches the subject matter of the instant claims. Williams *et al.* discloses a sprayable coating formulation comprising chlorosulfonated polyethylene polymer having a viscosity of 600-800 cps (77 °F); the overall composition would appear to have viscosity that lies outside the claimed range. Moreover, inventive compositions are used for treatment of a rubber turnup bladder of a tire assembly machine, as well as for other flexible elastomeric machine components. The adhesive formulations of Skelley are made for bonding substrates such as foam, textiles, wood, cellulosics, polymers, metal, and glass, and the adhesive formulation described in Gupta is used for adhering polymer insulation onto a conducting wire. One of ordinary skill in the art would not have found it obvious to use the products disclosed in the cited prior art to coat an exterior surface of a wall.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rip A. Lee whose telephone number is (571)272-1104. The examiner can be reached on Monday through Friday from 9:00 AM - 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reached at (571)272-1114. The fax phone number for the organization where this application or proceeding is assigned is (571)273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on the access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).

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April 17, 2006

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